

The DoD M&S Strategy & the Supporting Role of the Defense Modeling & Simulation Office

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DoD M&S Vision

Defense modeling and simulation will provide readily-available, operationally-valid environments for use by DoD components

- to train jointly, develop doctrine and tactics, formulate operational plans, and assess war fighting situations
- as well as to support technology assessment, system upgrade, prototype and full scale development, and force structuring.

Furthermore, common use of these environments will promote a closer interaction between the operations and acquisition communities in carrying out their respective responsibilities. To allow maximum utility and flexibility, these modeling and simulation environments will be constructed from affordable, reusable components interoperating through an open systems architecture.

DoD Executive Council on Modeling and Simulation (EXCIMS),
March 13, 1992

The Strategy Is Being Executed Through a DoD-wide M&S Master Plan

Objective 1

Develop a common technical framework for M&S

Objective 2

Provide timely and authoritative representations of the natural environment

Objective 3

Provide authoritative representations of systems

Objective 4

Provide authoritative representations of human behavior

Objective 5

Establish an M&S infrastructure to meet developer and end-user needs

Objective 6

Share the benefits of M&S

Sub-objectives

Quantify impact

Education

Sub-objectives

High-level architecture

Sub-objectives

2-1 Terrain

Conceptual models

of the mission space

1-3 Data standardization

Atmosphere

2-4 Space

Sub-objectives

<u>Individuals</u>

Groups and organizations

Sub-objectives

Field systems

<u>5-2</u> VV&A

5-3 Repositories

6-3 Dual-use

Communications

5-5 Coordination Center

DoD 5000.59-P, Modeling and Simulation Waster Plan, October 1995



DMSO's Mission: Key corporate-level functions necessary to achieve the DoD Vision for M&S

DMSO responsibilities include:

- Manage DoD-M&S policies, directives and publications
- Lead establishment and maintenance of a common technical framework
- Provide, or coordinate provision of, broadly-useful common infrastructure, services, and tools to the M&S community
- Lead development of DoD plan for the development and exploration of M&S-related technology and execute such activities as appropriate
- Advise, and provide OSD oversight of, major simulation programs
- Foster cooperative M&S developments among DoD Components
- Represent DoD in commercial and international M&S-related organizations and standards bodies
- Provide administrative support to the EXCIMS and subordinate bodies







Gary Yerace Chief of Staff



Col Crash Konwin Director



COL Wm. Forrest Crain Deputy Director



Dr. Judith Dahmann Chief Scientist



LTC Harry Thompson Chief, Operations



LtCol Mac McKeon Chief, Tech. Applications



Waverly Debraux Chief, Bus. and Fin. Mgmt.





CAPT (sel) Dave Johnson, USN Chief, Operations Division

COL Wm Forrest Crain, USA Deputy Director

Staff Arrivals
Summer 1999





1998 M&S Industry Days Themes

- People are the most important ingredient to effective change
 - They deliver the technology & transition it to better tools
 - They train their colleagues in effective use
 - They deliver the solutions to the warfighter's needs
- Partnerships are the only practical way ahead
 - Strategic relationships tailored to application domain will increase
- <u>Pragmatism</u> is necessary to discover the affordable way ahead
 - Must satisfy today's needs better while preparing for an even better tomorrow



M&S Awards Program

RRRR

"People, Partnerships, and Pragmatism"

M&S Awards Program

- Awards for achievement in *Analysis, Training*, *Acquisition*, *and multi-domain* categories
- Government and non-government will not compete
- For the first year, the program will consider nominations for 8 awards (a government and industry recipient for each of the 4 categories)
- Awards do not have to be approved for every category if there is no qualified candidates for a particular category, then there will not be an award in that category for that year
- Awards will be of *nominal value* only (i.e., plaques, etc)



M&S Awards Program: Award Categories

For achievement in the area of

Analysis

- Achievement by a government group/team or individual
- Achievement by non-government group/team or individual

For achievement in the area of

Training

- Achievement by a government group/team or individual
- Achievement by non-government group/team or individual

For achievement in the area of

Acquisition

- Achievement by a government group/team or individual
- Achievement by non-government group/team or individual

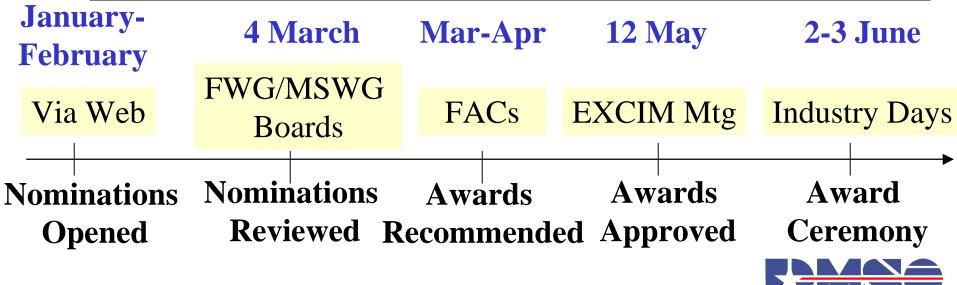
Cross-Function: For achievement across all 3 M&S areas

For both government and non-government organizations/individuals



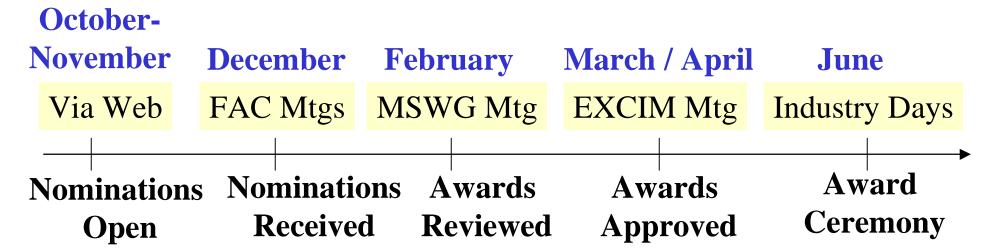
M&S Awards Program: Schedule for FY 98 Awards





M&S Awards Program: Award Process Timelines (FY 99 and Later)

Nominations thru FACs/ISG Reviewed by MSWG Approved by EXCIMS





Acquisition

Government Award

- During the award period, assigned to a government organization in the capacity as a government employee/military member
- During the award period, has made a noteworthy contribution to the development, implementation, or support of technical capabilities or operational systems that directly furthered the stated DOD M&S interests in the field of Acquisition i.e., providing affordable, reusable, interoperable and readily-available environments in order to facilitate:
 - Reduction in time required in the acquisition process
 - Reduction in resources required in the acquisition process
 - Reduction in the risk associated with the acquisition process
 - Increase in the quality of the systems being developed



Training

Government Award

- During the award period, assigned to a government organization in the capacity as a government employee or military member
- During the award period, has made a noteworthy contribution to the development, implementation, or support of technical capabilities or operational systems that directly further the stated DOD M&S interests in the field of training i.e., providing affordable, reusable, interoperable and readily-available environments in order to facilitate:
 - Economies in Training
 - Creation of training situations that would not normally be possible such as realistic simulations of combat and mission rehearsals
 - Enhanced safety in training simulating dangerous situations
 - Real-time performance evaluation/feedback
 - Reduction in impact of environmental issues upon training
 - Facilitation of long-distance distributed training that fosters joint and combined training events



Analysis

Government Award

- During the award period, assigned to a government organization in the capacity as a government employee or military member
- During the award period, has made a noteworthy contribution to the development, implementation, or support of technical capabilities or operational systems that directly further the stated DOD M&S interests in the field of Analysis i.e., providing affordable, reusable, interoperable and readily-available environments in order to facilitate:
 - Conduct of force structure analysis/force sizing&mix studies
 - Development of operational courses of actions/plans
 - Development of doctrine and tactics
 - Conduct of logistics analysis
 - Performance of real-time After Action Reporting
 - Performance of system and test planning



Cross-Functional Area

Non-Government Award

- During the award period, employed by a non-governmental organization
- During the award period, has made a noteworthy contribution to the development, implementation, or support of technical capabilities or operational systems that directly further the overall DOD M&S objective i.e., providing affordable, reusable, interoperable, readily-available, and operationally valid environments to facilitate:
 - Joint training
 - Development of doctrine and tactics
 - Formulation of operational plans
 - Assessments of war fighting situations
 - Support for technology assessment
 - Support for force structuring activities
 - Development of enabling technologies architecture
 - Support for C4ISR

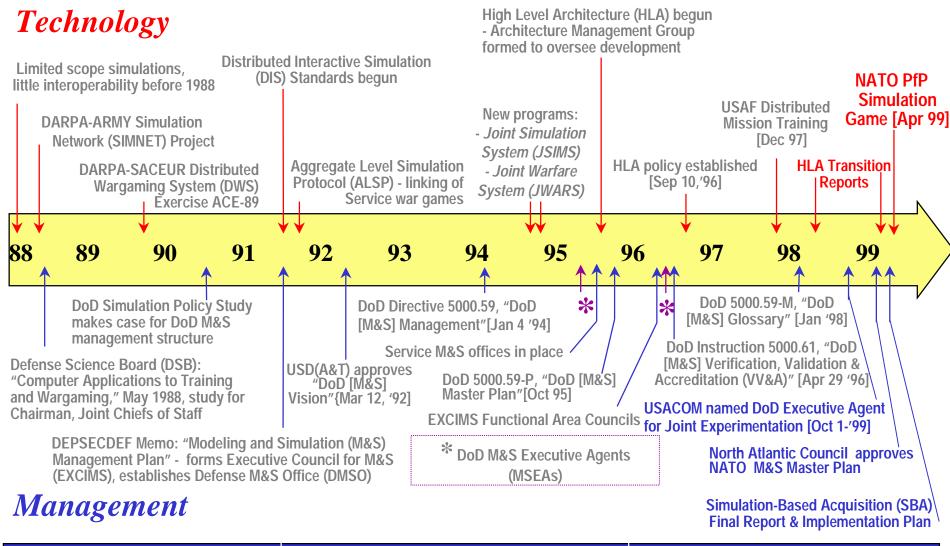


1998 M&S Awards Program

- People are the most important ingredient to effective change
 - DMSO M&S Awards Project Officer (Jeff Guild)
 - Functional Working Group Chairs & Individual Members
 - Don Bates (Analysis); Robin Frost (Acquisition); Dan Gardner (Training)
- Partnerships are the only practical way ahead
 - Industry and Government Reviewers / Voters
 - DMSO & NTSA Co-sponsor Award Trophies
- <u>Pragmatism</u> is necessary to discover the affordable way ahead
 - Program for FY 98 executed on compressed schedule w/ lessons learned applied towards future iterations



The Past, the Present, & into the Future



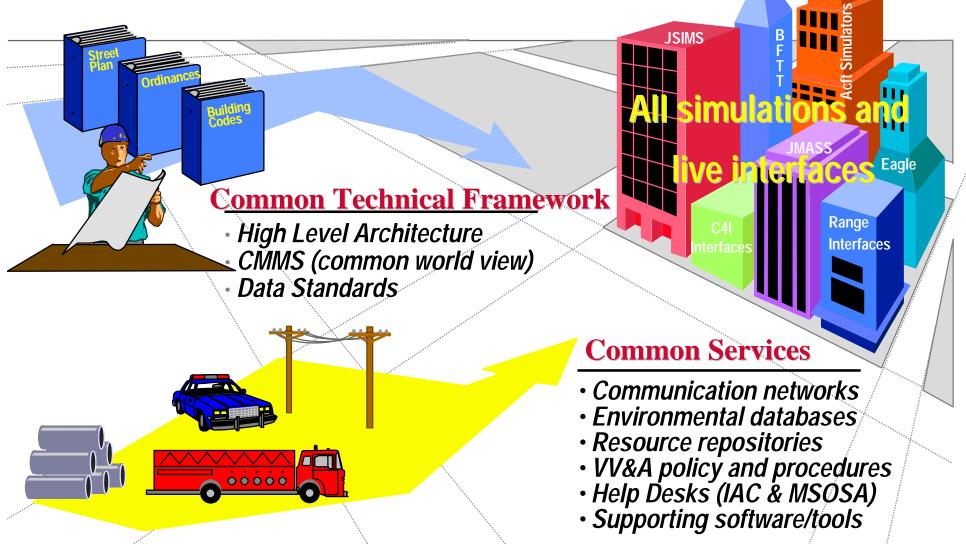
No formal DoD management structure

Management structure stand-up

Initial management structure in place



DoD M&S Strategy:
An Analogy to City Planning



Payoffs: Interoperability and reuse = capability and cost-effectiveness



